WORKSHOP

"Infomobility and Flexible Transport Services: towards governance and sustainability in European cities"

Mobility Governance, ICT systems and organisational/operational dimensions

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Florence, May 25-26, 2006
“Mobility Governance is a tool for…”

Mobility

“Complex Process with different impacts…..”

- Environment...
- Overall quality of life...
- Energy savings...
- Social cohesion and inclusion....
- Qualification of urban areas...
- Safety and incidents...
- Economical issues...
- Traffic and Transport....
- Services and city organisation...
- ... Overall services accessibility...

Environmental Sustainability/Mobility Efficiency
European City/MA Experiences and the strategies defined/financed by European Commission

Integrated Approach

Shifting mobility/transport demand from private cars towards collective transport and “light” modalities/solutions (i.e. eco-vehicles for people and freight, .....)

European Trends
“Governance of Urban Mobility”

3 Dimensions
- Processes and needs knowledge
- Technologies/systems/tools
- Organization/Operation

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Services/Tools/Systems

New use of cars (car sharing, car-pooling)

Methodologies and tools for integrated planning of mobility and transport

Access control

Support to demand and offer management

Measures to foster safety on the roads

ICT Infrastructures and ITS supporting the management and control of traffic network, public transport and users information, ...

Imagination of the conventional public transport (integration, regularity, commercial speed, BRT..) and introduction of FTS services (DRTS, P&R, etc.)

Management of the demand (es. Road Pricing, Congestion Charge, pedestrian zone lane restriction, BRT..)

Integrated management of parking systems and ticketing systems

Logistics services and IT platform for goods distribution
Urban Mobility: the ICT dream

- Realization of monitoring systems and control schemes....
- Improvement of the overall services accessibility and quality..
- Supply of “customized” services and infomobility...
- Integration of the systems, devices, tools,....
- Coordination of different services and resources....
- Networking among Local Authorities, Transport Executives

Friendly Authorisation by Mizar Spa
The ITS Products: The Reality

• MODELLING AND SIMULATION TOOLS;
• TRAFFIC LIGHT COORDINATION and TRAFFIC DATA COLLECTION;
• VARIABLE MESSAGE SIGNALS;
• INTEGRATED PARKING MANAGEMENT;
• ACCESS CONTROL and CONGESTION/ROAD PRICING;
• INTEGRATED PAYMENT SYSTEM;
• USER INFORMATION/PORTAL;
• GOODS DISTRIBUTION PLATFORM;
• PT MONITORING AND FTS;

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➔ WIDE INTEREST in Public Authority stakeholders/politicians
➔ Some of these Kernel for Infomobility services
Systems and Tools for Public Transport

- Bus and tram priority systems
- Bus Rapid Transit - BRT
- Long/short range communication infrastructures
- Traveller/User information systems pre/on trips
- Vehicle location and operations management systems (AVL, AVM/SAE,...)
- Fare Collection, Integrated Payment Systems
- Flexible Transport Services and DRTs
- Surveillance Systems, Safety and Security solutions
- Data modelling and Network planning
- Advanced ICT platform for Company management

**PT Current Situation:**

*Mix of legacy, conventional and advanced systems*
Bus Rapid Transit - BRT
"On street" Users Information

Operational Complexity

On Board Computer failure

Equivalent to

BUS Engine failure!!!!!
Towards the integration ...

- Integrated Parking Management (PMS)
- Traffic Lights Coordination (UTC)
- Dynamic information (VMS)
- Integrated ticketing/City Cards (IFS)
- Fleet monitoring and LPT information (AVM/AVL)

- Public Transport and traffic control (priority to public vehicles)
- Web Portal as main access to transport services and user information
- Integrated Management and Coordination of fleets (LPT, DRTs, logistics)
- .......

......City system, Infoservices, ....

......Multiservices FTS Agency......
Towards the integration... Overall Urban Control Integration...
Towards the Integration: Agency for Flexible Transport Services

Flexible Agency for Collective Mobility Services

**B2C Services**
- booking & reservations
- service information
- ...

**B2B Services**
- resource availability
- trip orders
- travel plans
- payments
- ...

**WEB INFRASTRUCTURE**

**DRT Planning & Operation Services**

**REAL-TIME DATA EXCHANGE (GSM/GPRS)**

**VEHICLE PROVIDERS, TRANSPORT OPERATORS**

**USER GROUPS / ASSOCIATIONS**

**DROP-OFF POINT**

**PICK-UP POINT**

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A Real Risk: to act only on the ICT dimension

INFRASTRUCTURES/ICT SOLUTIONS

MOBILITY GOVERNANCE

ORGANISATION EXPERTISES/COMPETENCES/RESOURCES

OPERATION COORDINATION/INTEGRATION
Some Considerations...

- Interrelated problems that can be faced using integrated solutions
- These solutions base on the knowledge of ICT systems as relevant supporting tool
- Awareness of the role of ICT tools/systems as relevant but not self-made key solution for the effective achievements
- Different skills are required (from the problems identification to the design, implementation and management of integrated and complex solutions, etc)
- Foster the consolidation of analytic and “problem-solving” capabilities that are able to play in multi disciplinary context
- Increase the flexibility that is required to work in various contexts
- Need of High-level and cross-acting professional profiles ......... avoiding to strengthen the “digital divide” approach ......

..........training courses and educational approach .key role of TRANSIT COMPANIES and UNIVERSITIES. ..........LOCAL and REGIONAL AUTHORITIES.....
The Market

IT offer is increasing in several sectors related to Mobility, Transport, Logistics and PT......

Over-estimation of the single tool/system......

Products/systems not completely customized ............

IT supplier not completely able to face the overall complexity of processes and needs of the Authority/PT Companies.....

LOCAL ADMINISTRATION
Country share, Municipalities, PT Executive, Port Authority,..
UNIVERSITIES
REGIONAL ADMINISTRATION

Qualification of the demand and increase of the capability to manage of IC Technologies and systems for the “governance” of the different mobility-transport – environment processes
at Local level
“Municipality, Province/Shire, Transport Executives...”

• Develop and strengthen an internal capability to identify the real objectives and needs and define the related requirements of ITS systems

• Develop competences able to “choose” and evaluate the different products of the current ITS supermarket and manage “high-level complexity” call for tender and work commitment

• Strengthen and increase the technical and operational resources with the entrance of new professional profile and with focused training courses targeted on “processes, systems and procedures”

• Re-define the structure/organisation of the Authority/Company (puchaser) on the basis of the possibilities provided by ITS systems and on the basis of the overall system complexity
**AT Regional level**

- Definition of requirements and functional framework in agreement with the work carried out at European Level (FRAME......) and National Level (ARTIST......)
- Provide guidelines (where possible) to identify systems and services requirements based on the users and process needs
- Develop shared evaluation methodology in order to guarantee the customer and the same suppliers during tender process and the work commitment
- Provide financial support for demonstration, promotion and diffusion of ICT systems/services in relevant regional areas (demonstration sites)
- Definition of a clear law and regulation framework for the application of ICT systems in the overall governance of mobility, logistics and transport.
Thanks for the attention...

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